



TFT LCD Preliminary Specification

MODEL NO.: V216B1 - C01

Customer: _____

Approved by: _____

Note:

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Issued Date: Jul. 03, 2008
CMO Model No.: V216B1 – C01

Preliminary

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Record of Revision

Version	Date	Page (New)	Section	Description
Ver.1.0	Jul.3,'08	All	All	Preliminary Specification was first issued.

1.0 Handling Precautions

- The LCD panel is made of glass and may break or crack if dropped on a hard surface. It is necessary to handle it carefully.
- Since front polarizer is easily damaged, pay attention not to scratch it.
- When the panel surface is soiled, wipe it with absorbent cotton or other soft cloth gently.
- Do not touch the front screen surface when assembling.

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2.0 General Description

This specification is applied to the Type V216B1 TFT/LCD cell. This cell is designed for a display unit for TV application.

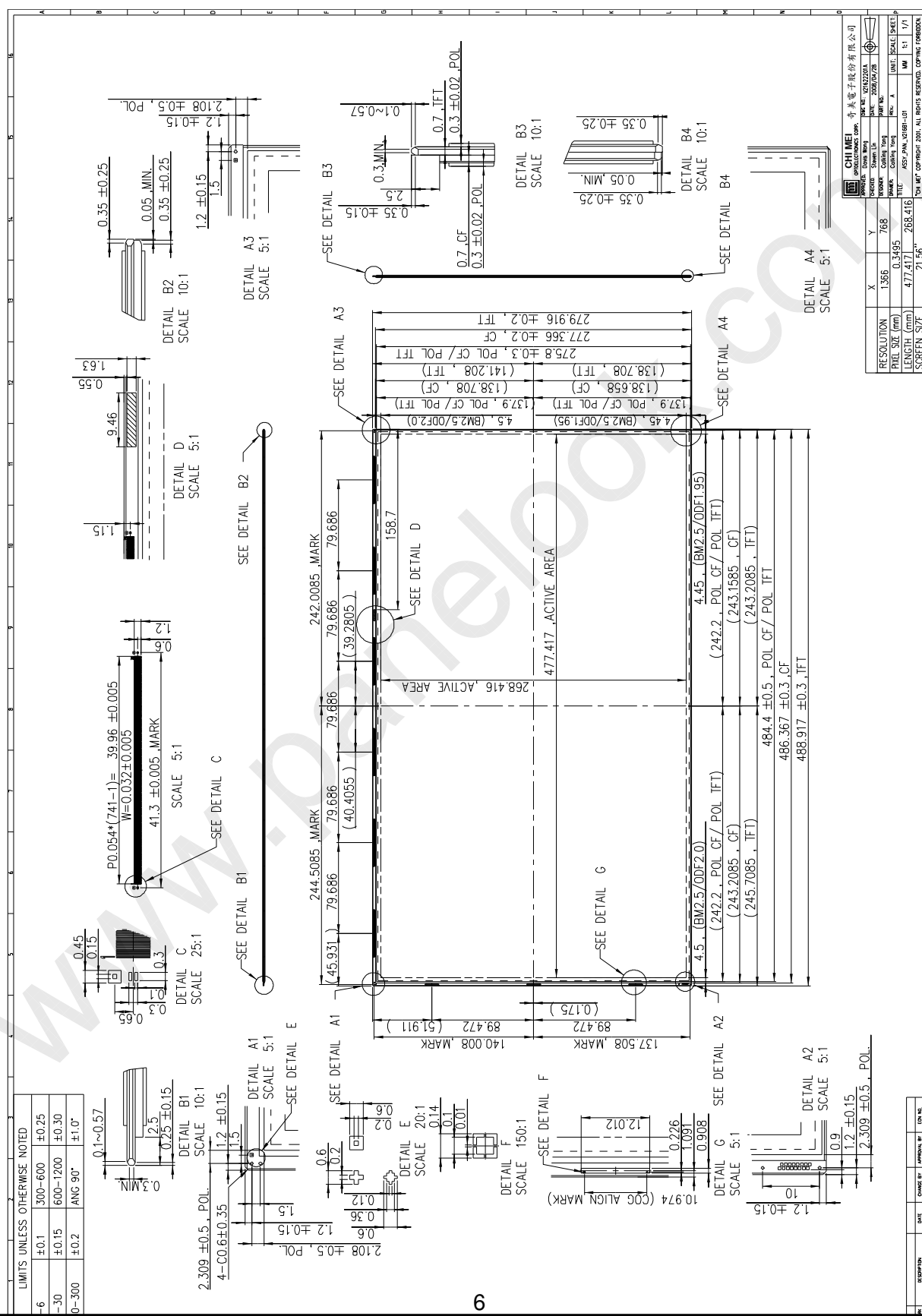
The screen format is intended to support the WXGA (1366(H) x 768(V)) screen.

2.1 Characteristics

CHARACTERISTICS ITEMS	SPECIFICATIONS
Screen Diagonal [in]	21.6
Pixels [lines]	1366 x R.G.B. x 768
Active Area [mm]	477.417 (H) x 268.416 (V) (21.6" diagonal)
Sub -Pixel Pitch [mm]	0.1165 (H) x 0.3495 (V)
Pixel Arrangement	RGB vertical stripe
Weight [g]	TYP. 568
Physical Size [mm]	488.917(W) x 279.916(H) x 2.0(D) Typ.
Display Mode	Transmissive mode / Normally White
Contrast Ratio	800:1 Typ. (Typical value measured at CMO's module: V216B1-L01)
Glass thickness (Array/CF) [mm]	0.7 / 0.7
Viewing Angle (CR>10)	+85/-85(H),+80/-80(V) Typ. (Typical value measured at CMO's module: V216B1-L01)
Color Chromaticity	R=0.644, 0.331 G=0.273,0.588 B=0.151,0.061 W=0.285,0.293 *Please refer to "color chromaticity" on p.14 (Typical value measured at CMO's module: V216B1-L01)
Cell Transparency [%]	7.6%Typ. (Typical value measured at CMO's module: V216B1-L01)
Polarizer (CF side)	Anti-glare coating, 484.4(H) x 275.8(w). Hardness: 3H
Polarizer (TFT side)	484.4(H) x 275.8(w)



The following figure shows cell outline.

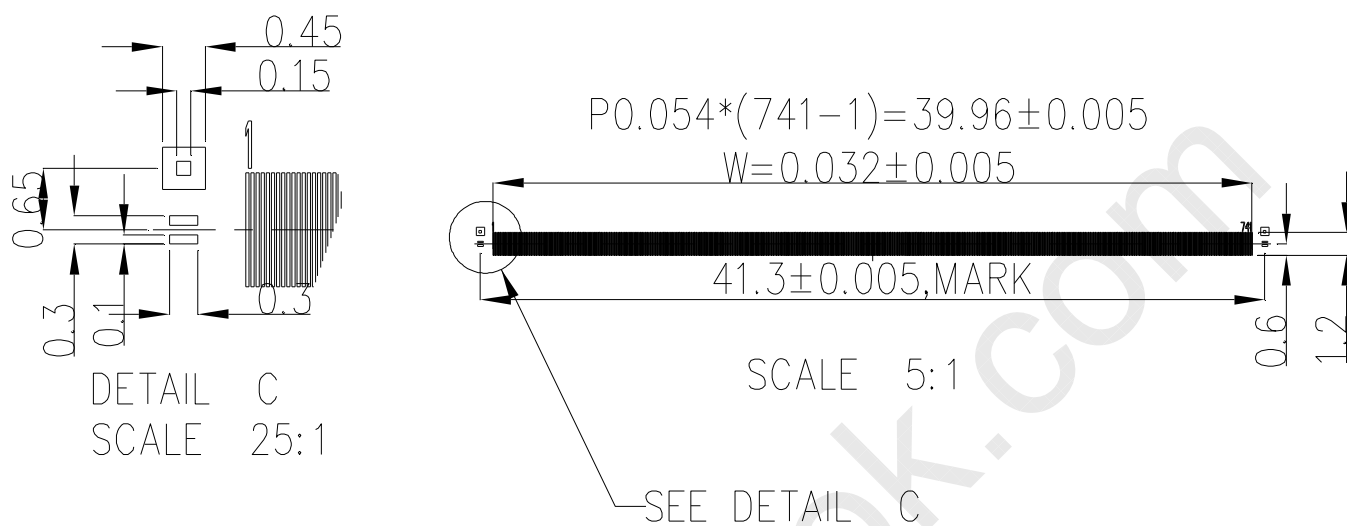


Version1.0

3.1 PAD Design

The following figure shows Data & Scan pad design.

[**Data Pad**] Unit [mm]



3.2 OLB PAD Assignment

DATA PIN DEFINE

pin number	Data 1	Data 2~5	Data 6
1	Test	Test	Test
2	Test	Test	Test
3	Test	DUMMY	DUMMY
4	Test	DUMMY	DUMMY
5	LR	DUMMY	DUMMY
6	XAO	DUMMY	DUMMY
7	OE	DUMMY	DUMMY
8	CPV	DUMMY	DUMMY
9	Test	DUMMY	DUMMY
10	STV2	DUMMY	DUMMY
11	DUMMY	DUMMY	DUMMY
12	VSS	DUMMY	DUMMY
13	VSS	DUMMY	DUMMY
14	VDD	DUMMY	DUMMY
15	VDD	DUMMY	DUMMY
16	DUMMY	DUMMY	DUMMY
17	VEE	DUMMY	DUMMY
18	VEE	DUMMY	DUMMY
19	Vgl	DUMMY	DUMMY
20	Vgl	DUMMY	DUMMY
21	Vgl	DUMMY	DUMMY
22	Vgl	DUMMY	DUMMY
23	Vgl	DUMMY	DUMMY
24	Vgl	DUMMY	DUMMY
25	DUMMY	DUMMY	DUMMY
26	Vgh	DUMMY	DUMMY
27	Vgh	DUMMY	DUMMY
28	Vgh	DUMMY	DUMMY
29	Vgh	DUMMY	DUMMY
30	Vgh	DUMMY	DUMMY
31	Vgh	DUMMY	DUMMY
32	DUMMY	DUMMY	DUMMY

33	Vcom	Vcom	Vcom
34	Vcom	Vcom	Vcom
35	Vst=GND	DUMMY	DUMMY
36	Vst=GND	DUMMY	DUMMY
37	Vcom	DUMMY	DUMMY
38	Test	Test	Test
39	Test	Test	Test
40	Test	Test	Test
41~43	DUMMY	OUT1~3	OUT1~3
44~721	OUT1~678	OUT4~681	OUT4~681
722~724	OUT679~681	OUT682~684	DUMMY
725	Test	Test	Test
726	Test	Test	Test
727	Test	Test	Test
728	DUMMY	DUMMY	Test
729	Vcom	Vcom	Vcom
730	DUMMY	DUMMY	Vst=GND
731	DUMMY	DUMMY	Vst=GND
732	DUMMY	DUMMY	Vgl
733	DUMMY	DUMMY	DUMMY
734	DUMMY	DUMMY	Vcom
735	DUMMY	DUMMY	Vcom
736	DUMMY	DUMMY	Test
737	DUMMY	DUMMY	Test
738	Vcom	Vcom	Vcom
739	Vcom	Vcom	Vcom
740	Test	Test	Test
741	Test	Test	Test

Note: Test pin is recommend for floating

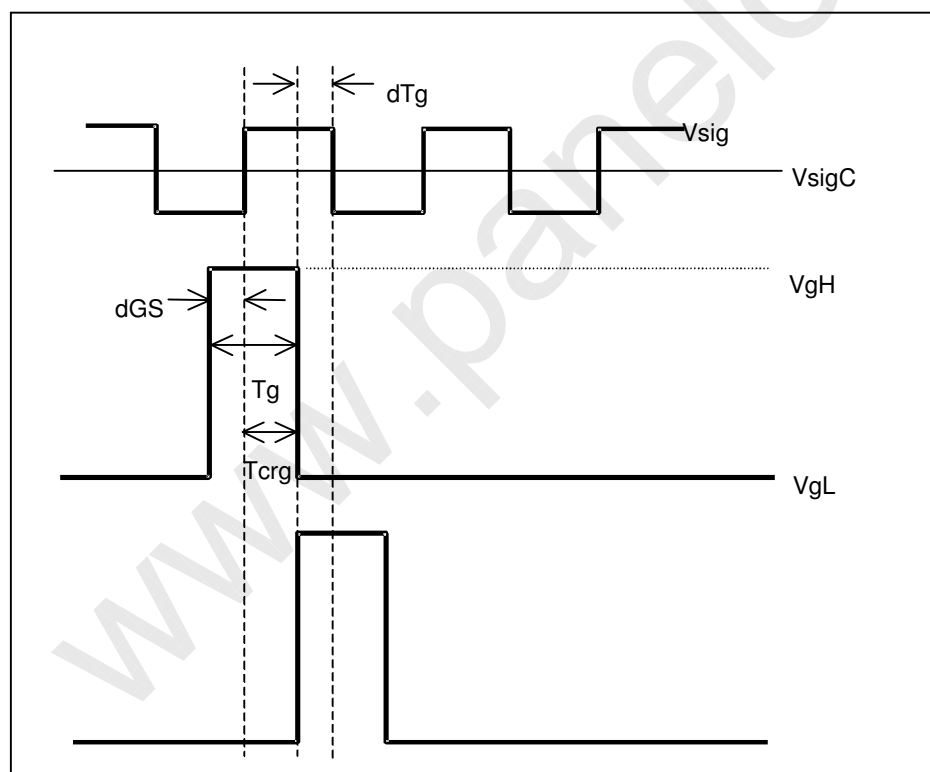
SCAN PIN DEFINE

Scan 1~3											
	DUMMY	OE	CPV	PASS2	STV2	VSS	MODE2	VDD	VGL	VGL	
XAO											VGL
VDD											VGL
LR											VGH
TEST											VGH
TEST											PASS1
											Dummy PAD
											Dummy
DUMMY											OUT263
.											.
.											.
											.
											.
											.
											OUT129~135=> Dummy
.											.
.											.
.											.
.											.
.											.
DUMMY											OUT1
											Dummy
											Dummy PAD
TEST											PASS1
TEST											VGH
LR											VGH
VSS											VGL
XAO											VGL
	DUMMY	OE	CPV	PASS2	STV1	VSS	MODE1	VDD	VGL	VGL	

3.3 Operating condition

The following table describes operating condition at CMO cell inspection

Item		Cell Inspection Condition
Gate	V _{gh}	25.6V
	V _{gl}	-5.5V
	Sig/Com Reverse Time	20.6 μ s
	dGS	-1.7 μ s
	dT _{g1}	3.8 μ s
	T _g (Gate On Time)	15.2 μ s
	T _{crg} (Writing Time)	15.2 μ s
Frame Frequency		60Hz
Signal	(Black) V _{sig} Center	5.91V
	(BWhite) V _{sig} Center	5.93V
Common	V _{com} Center	5.5V
	V _{com} Amplitude	0.00V
	V _{com} Adjustment	± 0.5 V
LC	(Black)	5.3V
	(White)	0.33V



4.0 Storage Conditions

High temperature or humidity may reduce the performance of panel. Please store LCD panel within the specified storage conditions. The recommended storage conditions are $25^{\circ}\text{C} \pm 5^{\circ}\text{C}$, $50 \pm 10\% \text{RH}$.

5.0 Label and Packaging

5.1 Label

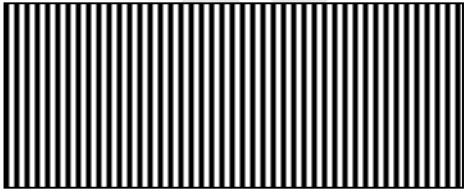
5.1.1 PANEL LABEL



T2243036NY01

5.1.2 PPBOX AND CARTON LABEL

Model Name	V216B1-C01
Panel Type	21WX01
Quantity	25
Case ID	(CMO internal define)
Note1	
Note2	


XXXXXXXXXXXXXXXXXXXX

5.2 Packaging

5.2.1 PACKING SPECIFICATIONS

- (1) 25 LCD TV Panels / 1 Box
- (2) Box dimensions : 583(L) X 374 (W) X 133 (H)
- (3) Weight : approximately 29Kg (50 panels per bag)

5.2.1 PACKING METHOD

Figures 5-1 and 5-2 are the packing method

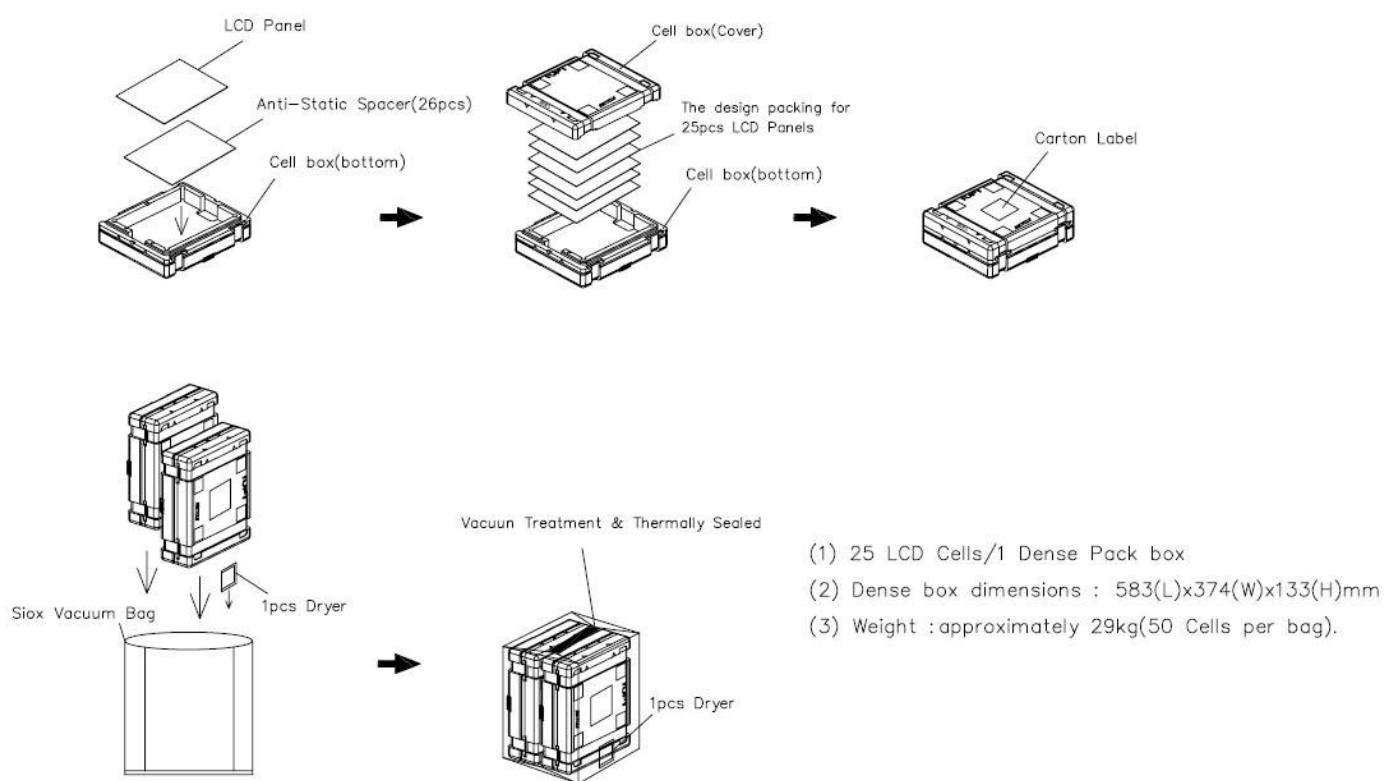


Figure.5-1 packing method

Pallet Stack:L1180*W950*H1645mm

Weight: 711 kg

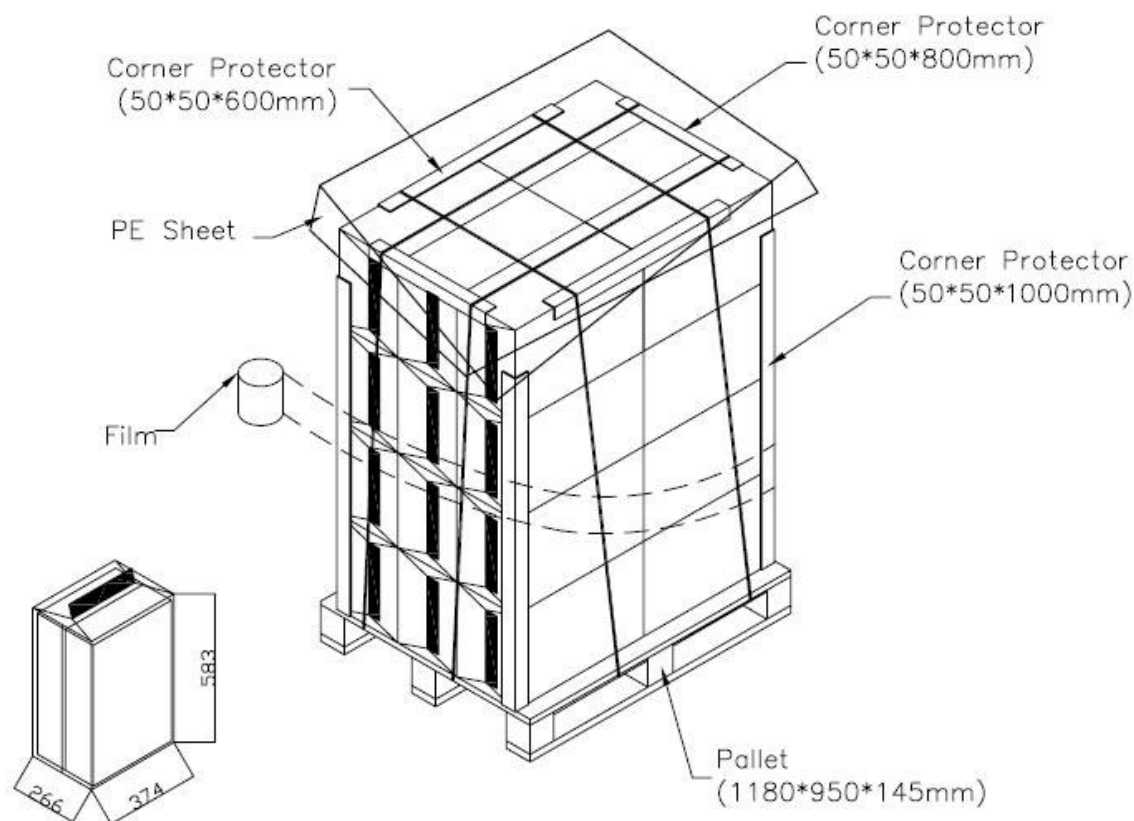


Figure.5-2 packing method

6.0 Others

If any doubt arises in relation to items not defined in this agreement or any articles in this agreement, both parties shall discuss it with sincerity and arrive at a mutual decision.

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